



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,311	11/21/2005	Sankar Narayan Jagannathan	1890-0188	6425

7590 06/23/2009
Maginot, Moore & Beck LLP
111 Monument Circle, Suite 3250
Indianapolis, IN 46204-5109

EXAMINER

TAHA, SHAQ

ART UNIT	PAPER NUMBER
----------	--------------

2446

MAIL DATE	DELIVERY MODE
-----------	---------------

06/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/524,311</p>	<p>Applicant(s) JAGANNATHAN ET AL.</p>	
	<p>Examiner SHAQ TAHA</p>	<p>Art Unit 2446</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 12 June 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____.
- Claim(s) objected to: _____.
- Claim(s) rejected: 18 - 37.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2446

Continuation of 11: The Applicant Argues: That Gemelli also fails to teach a comparison between a compressed destination address identifier with compressed forwarding addresses so as to find a correspondence between the destination address and an entry of the routing table.

In response, the examiner respectfully submits: Gemelli et al. teaches routing or compressing packets destination address through an electronic routing or compressing device, the packets destination address being n bit packets and having address indicative of a desired destination, wherein the routing table search process is the most important operation in the IP routing method. When an IP address, identified in the current IP version 4 implementations by a unique 32-bit field, is received by a router, the network prefix contained in this address must be considered in order to search in a forwarding table using the network prefix as its key and in order to determine which entry in the table represents the best route for the address to take in its journey across its destination, wherein the routing table search process searches for an IP address by comparing the prefix of each IP address in the table, (Gemelli et al., Col. 1 lines 53 - 57)

The Applicant Argues: That Gemelli also fails to teach that forwarding addresses are compressed using the same compression algorithm as used for the destination addresses.

In response, the examiner respectfully submits: Gemelli et al. in view of Huang et al. teaches compressing the network prefix in order to perform the search in a table having a limited size. Many compression methods are known. In particular, we will refer to a method based on predictable duration algorithms, and among this class of algorithms to the algorithms suitable of a pipelined implementation, (Gemelli et al., Col. 1 lines 61 – 66), wherein Huang et al. teaches in FIG. 2a and FIG. 2b show a compression bit map (CEM) method of the conventional 8-bit network address forwarding table in FIG. 1. CBM forwarding table 520 sets each of the starting entries of the range in the forwarding table 510 by bit "1", and other entries by bit "0", as shown in FIG. 2a, (Huang et al., Paragraph 7, Page 1).

The Applicant Argues: That Huang et al. fails to teach comparing the compressed destination address identifier with forwarding addresses available for routing, which forwarding addresses have been compressed using the compression algorithm and stored as entries of a routing table.

In response, the examiner respectfully submits: Huang et al. teaches Gemelli et al. in view of Huang et al. teaches compressing the network prefix in order to perform the search in a table having a limited size. Many compression methods are known. In particular, we will refer to a method based on predictable duration algorithms, and among this class of algorithms to the algorithms suitable of a pipelined implementation, (Gemelli et al., Col. 1 lines 61 – 66), wherein Huang et al. teaches a network address forwarding table lookup apparatus and method for identifying a network address to determine a next hop address to which data packets having the network address should be forwarded, (Abstract), and IPv4 address forwarding table lookup apparatus for identifying a 32-bit Internet Protocol (IP) address to determine a next hop address to which data packets having the IP address should be forwarded, (Huang et al., Paragraph 19).

The Applicant Argues: That there is no Motivation to Combine Gemelli and Huang.

In response, the examiner respectfully submits: Gemelli et al. teaches routing or compressing packets destination address through an electronic routing or compressing device, the packets destination address being n bit packets and having address indicative of a desired destination, wherein the routing table search process is the most important operation in the IP routing method. Huang et al. teaches a network address forwarding table lookup apparatus and method for identifying a network address to determine a next hop address to which data packets having the network address should be forwarded. The motivation to combine Gemelli et al. with Huang et al. is to occupy less memory space, which is smaller than the forwarding table, (Huang et al., Paragraph 7, Page 1).